

Submit 1 Copy To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
October 13, 2009

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-39585
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator COG Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator 2208 W. Main Street, Artesia, NM 88210		7. Lease Name or Unit Agreement Name Moody 18 State Com
4. Well Location Unit Letter <u>D</u> : <u>330</u> feet from the <u>North</u> line and <u>330</u> feet from the <u>West</u> line Section <u>18</u> Township <u>25S</u> Range <u>28E</u> NMPM <u>Eddy</u> County		8. Well Number 1H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3056' GR		9. OGRID Number 229137
		10. Pool name or Wildcat Red Bluff; Bone Spring

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐		OTHER: ☐	
OTHER: BHL & Name Change ☒			

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC respectfully requests approval for the following name change and BHL change.

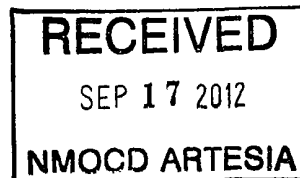
Name Change:

From: Myox 18 State Com #1H
To: Moody 18 State Com #1H (39445)

BHL Change:

From: 1250' FSL & 420' FWL.
To: 330' FSL & 380' FWL.

New drilling program, directional plan and well plat attached.



Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Mayte Reyes TITLE: Regulatory Analyst DATE: 9/17/12

Type or print name: Mayte Reyes E-mail address: mreyes1@conchoresources.com PHONE: (575) 748-6945

For State Use Only

APPROVED BY: TC Shepard TITLE: Geologist DATE: 9/17/2012

Conditions of Approval (if any):

SURVEY NO. 588B

Moody 18 State Com #1H

	Hole Size	Casing	Wt	Depth	Cmt	TOC
Surface	17.5	13.375	48	400'	400	0
Intrmd	12.25	9.625	36	2300'	700	0
Prod	7.875	5.5	17	12,349'	1650	1800'

Plan to drill a 17-1/2" hole to 400' with Fresh Water. Run 13-3/8", 48#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 2300' with Brine, and run 9-5/8", 36#, J-55 and cement to surface. Drill 7-7/8" pilot hole to 9350' to run OH logs. Plug back PH to kick off and drill 7-7/8" curve and lateral to 12,349 MD (7930' TVD), and run 5-1/2", 17#, P-110 csg and cement to 1800'.

Well Control

Type	Pressure	Test	Manufacture
Double Ram	3000	3000	Cameron



COG Operating LLC

Eddy County(NM27E)

Sec 18-T25S-28E

Moody 18 State Com 1H

Wellbore #1

Plan: Plan 1

Standard Planning Report

17 September, 2012

Archer
The well company

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Well Moody 18 State Com 1H
Company:	COG Operating LLC	TVD Reference:	KB @ 3073.0usft
Project:	Eddy County(NM27E)	MD Reference:	KB @ 3073.0usft
Site:	Sec 18-T25S-28E	North Reference:	Grid
Well:	Moody 18 State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Project	Eddy County(NM27E), Surface Location. 915'FSL & 400'FWL, Top of Paddock 4000'TVD		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 18-T25S-28E		
Site Position:		Northing:	413,428.78 usft
From:	Map	Easting:	602,920.89 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 10.304 N
		Longitude:	104° 0' 2.999 W
		Grid Convergence:	0 18 °

Well	Moody 18 State Com 1H		
Well Position	+N/-S	0.0 usft	Northing: 413,428.78 usft
	+E/-W	0.0 usft	Easting: 602,920.89 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 8' 10.304 N
			Longitude: 104° 0' 2.999 W
			Ground Level: 3,056.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/09/17	7.62	60.00	48,393

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0 0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0 0	0.0	179 13

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0 00	
7,412.6	0.00	0.00	7,412.6	0.0	0.0	0.00	0.00	0 00	0 00	
8,158.0	89.45	179 13	7,890.0	-472.9	7.2	12.00	12.00	0.00	179.13	Moody 1H PBHL
12,349.3	89.45	179.13	7,930.0	-4,663.4	71.0	0.00	0.00	0 00	0.00	Moody 1H PBHL



Great White Directional Services
Planning Report

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Project:	Eddy County(NM27E)	MD Reference:	KB @ 3073.0usft
Site:	Sec 18-T25S-28E	North Reference:	Grid
Well:	Moody 18 State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Moody 18 State Com 1H
Company:	COG Operating LLC	TVD Reference:	KB @ 3073.0usft
Project:	Eddy County(NM27E)	MD Reference:	KB @ 3073.0usft
Site:	Sec 18-T25S-28E	North Reference:	Grid
Well:	Moody 18 State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	0.00	0.00	5,400.0	0 0	0 0	0.0	0.00	0.00	0 00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0 0	0 0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0 0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0 0	0 0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0 0	0 0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0 0	0 0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0 0	0 0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0 0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0 0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,412.6	0.00	0.00	7,412.6	0.0	0.0	0.0	0.00	0.00	0.00
KOP-Build 12°/100									
7,425.0	1.49	179.13	7,425.0	-0.2	0.0	0.2	12.00	12.00	0.00
7,450.0	4.49	179.13	7,450.0	-1.5	0.0	1.5	12.00	12.00	0.00
7,475.0	7.49	179.13	7,474.8	-4.1	0.1	4.1	12.00	12.00	0.00
7,500.0	10.49	179.13	7,499.5	-8.0	0.1	8.0	12.00	12.00	0.00
7,525.0	13.49	179.13	7,524.0	-13.2	0.2	13.2	12.00	12.00	0.00
7,550.0	16.49	179.13	7,548.1	-19.6	0.3	19.6	12.00	12.00	0.00
7,575.0	19.49	179.13	7,571.9	-27.4	0.4	27.4	12.00	12.00	0.00
7,600.0	22.49	179.13	7,595.2	-36.3	0.6	36.3	12.00	12.00	0.00
7,625.0	25.49	179.13	7,618.1	-46.5	0.7	46.5	12.00	12.00	0.00
7,650.0	28.49	179.13	7,640.3	-57.8	0.9	57.8	12.00	12.00	0.00
7,675.0	31.49	179.13	7,662.0	-70.3	1.1	70.3	12.00	12.00	0.00
7,700.0	34.49	179.13	7,683.0	-83.9	1.3	83.9	12.00	12.00	0.00
7,725.0	37.49	179.13	7,703.2	-98.6	1.5	98.6	12.00	12.00	0.00
7,750.0	40.49	179.13	7,722.6	-114.3	1.7	114.3	12.00	12.00	0.00
7,775.0	43.49	179.13	7,741.2	-131.0	2.0	131.1	12.00	12.00	0.00
7,800.0	46.49	179.13	7,758.9	-148.7	2.3	148.7	12.00	12.00	0.00
7,825.0	49.49	179.13	7,775.6	-167.3	2.5	167.3	12.00	12.00	0.00
7,850.0	52.49	179.13	7,791.3	-186.7	2.8	186.7	12.00	12.00	0.00
7,875.0	55.49	179.13	7,806.0	-206.9	3.2	206.9	12.00	12.00	0.00
7,900.0	58.49	179.13	7,819.7	-227.9	3.5	227.9	12.00	12.00	0.00
7,925.0	61.49	179.13	7,832.2	-249.5	3.8	249.6	12.00	12.00	0.00
7,950.0	64.49	179.13	7,843.5	-271.8	4.1	271.8	12.00	12.00	0.00
7,975.0	67.49	179.13	7,853.7	-294.6	4.5	294.7	12.00	12.00	0.00
8,000.0	70.49	179.13	7,862.6	-318.0	4.8	318.0	12.00	12.00	0.00
8,025.0	73.49	179.13	7,870.4	-341.7	5.2	341.8	12.00	12.00	0.00
8,050.0	76.49	179.13	7,876.8	-365.9	5.6	365.9	12.00	12.00	0.00
8,075.0	79.49	179.13	7,882.1	-390.3	5.9	390.4	12.00	12.00	0.00
8,100.0	82.49	179.13	7,886.0	-415.0	6.3	415.0	12.00	12.00	0.00
8,125.0	85.49	179.13	7,888.6	-439.9	6.7	439.9	12.00	12.00	0.00
8,150.0	88.49	179.13	7,889.9	-464.8	7.1	464.9	12.00	12.00	0.00



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Wellbore:	Wellbore #1		
Design:	Plan 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,158.0	89.45	179.13	7,890.0	-472.9	7.2	472.9	12.00	12.00	0.00
EOC-Hold to TD									
8,200.0	89.45	179.13	7,890.4	-514.8	7.8	514.9	0.00	0.00	0.00
8,300.0	89.45	179.13	7,891.4	-614.8	9.4	614.9	0.00	0.00	0.00
8,400.0	89.45	179.13	7,892.3	-714.8	10.9	714.9	0.00	0.00	0.00
8,500.0	89.45	179.13	7,893.3	-814.8	12.4	814.8	0.00	0.00	0.00
8,600.0	89.45	179.13	7,894.3	-914.7	13.9	914.8	0.00	0.00	0.00
8,700.0	89.45	179.13	7,895.2	-1,014.7	15.4	1,014.8	0.00	0.00	0.00
8,800.0	89.45	179.13	7,896.2	-1,114.7	17.0	1,114.8	0.00	0.00	0.00
8,900.0	89.45	179.13	7,897.1	-1,214.7	18.5	1,214.8	0.00	0.00	0.00
9,000.0	89.45	179.13	7,898.1	-1,314.7	20.0	1,314.8	0.00	0.00	0.00
9,100.0	89.45	179.13	7,899.0	-1,414.7	21.5	1,414.8	0.00	0.00	0.00
9,200.0	89.45	179.13	7,900.0	-1,514.6	23.1	1,514.8	0.00	0.00	0.00
9,300.0	89.45	179.13	7,900.9	-1,614.6	24.6	1,614.8	0.00	0.00	0.00
9,400.0	89.45	179.13	7,901.9	-1,714.6	26.1	1,714.8	0.00	0.00	0.00
9,500.0	89.45	179.13	7,902.8	-1,814.6	27.6	1,814.8	0.00	0.00	0.00
9,600.0	89.45	179.13	7,903.8	-1,914.6	29.1	1,914.8	0.00	0.00	0.00
9,700.0	89.45	179.13	7,904.7	-2,014.6	30.7	2,014.8	0.00	0.00	0.00
9,800.0	89.45	179.13	7,905.7	-2,114.5	32.2	2,114.8	0.00	0.00	0.00
9,900.0	89.45	179.13	7,906.6	-2,214.5	33.7	2,214.8	0.00	0.00	0.00
10,000.0	89.45	179.13	7,907.6	-2,314.5	35.2	2,314.8	0.00	0.00	0.00
10,100.0	89.45	179.13	7,908.5	-2,414.5	36.8	2,414.8	0.00	0.00	0.00
10,200.0	89.45	179.13	7,909.5	-2,514.5	38.3	2,514.8	0.00	0.00	0.00
10,300.0	89.45	179.13	7,910.5	-2,614.5	39.8	2,614.8	0.00	0.00	0.00
10,400.0	89.45	179.13	7,911.4	-2,714.4	41.3	2,714.8	0.00	0.00	0.00
10,500.0	89.45	179.13	7,912.4	-2,814.4	42.8	2,814.8	0.00	0.00	0.00
10,600.0	89.45	179.13	7,913.3	-2,914.4	44.4	2,914.8	0.00	0.00	0.00
10,700.0	89.45	179.13	7,914.3	-3,014.4	45.9	3,014.7	0.00	0.00	0.00
10,800.0	89.45	179.13	7,915.2	-3,114.4	47.4	3,114.7	0.00	0.00	0.00
10,900.0	89.45	179.13	7,916.2	-3,214.4	48.9	3,214.7	0.00	0.00	0.00
11,000.0	89.45	179.13	7,917.1	-3,314.4	50.5	3,314.7	0.00	0.00	0.00
11,100.0	89.45	179.13	7,918.1	-3,414.3	52.0	3,414.7	0.00	0.00	0.00
11,200.0	89.45	179.13	7,919.0	-3,514.3	53.5	3,514.7	0.00	0.00	0.00
11,300.0	89.45	179.13	7,920.0	-3,614.3	55.0	3,614.7	0.00	0.00	0.00
11,400.0	89.45	179.13	7,920.9	-3,714.3	56.5	3,714.7	0.00	0.00	0.00
11,500.0	89.45	179.13	7,921.9	-3,814.3	58.1	3,814.7	0.00	0.00	0.00
11,600.0	89.45	179.13	7,922.8	-3,914.3	59.6	3,914.7	0.00	0.00	0.00
11,700.0	89.45	179.13	7,923.8	-4,014.2	61.1	4,014.7	0.00	0.00	0.00
11,800.0	89.45	179.13	7,924.7	-4,114.2	62.6	4,114.7	0.00	0.00	0.00
11,900.0	89.45	179.13	7,925.7	-4,214.2	64.2	4,214.7	0.00	0.00	0.00
12,000.0	89.45	179.13	7,926.7	-4,314.2	65.7	4,314.7	0.00	0.00	0.00
12,100.0	89.45	179.13	7,927.6	-4,414.2	67.2	4,414.7	0.00	0.00	0.00
12,200.0	89.45	179.13	7,928.6	-4,514.2	68.7	4,514.7	0.00	0.00	0.00
12,300.0	89.45	179.13	7,929.5	-4,614.1	70.3	4,614.7	0.00	0.00	0.00
12,349.3	89.45	179.13	7,930.0	-4,663.4	71.0	4,663.9	0.00	0.00	0.00
TD at 12349.3									



Great White Directional Services
Planning Report

Archer
The well company

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Moody 18 State Com 1H
Company:	COG Operating LLC	TVD Reference:	KB @ 3073.0usft
Project:	Eddy County(NM27E)	MD Reference:	KB @ 3073.0usft
Site:	Sec 18-T25S-28E	North Reference:	Grid
Well:	Moody 18 State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Moody 1H PBHL - plan hits target center - Point	0.00	0 00	7,930.0	-4,663.4	71.0	408,765.38	602,991.89	32° 7' 24.151 N	104° 0' 2.341 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,412.6	7,412.6	0 0	0.0	KOP-Build 12"/100
8,158.0	7,890.0	-472.9	7.2	EOC-Hold to TD
12,349.3	7,930.0	-4,663.4	71 0	TD at 12349 3



Project: Eddy County(NM27E)
 Site: Sec 18-T25S-28E
 Well: Moody 18 State Com 1H
 Wellbore: Wellbore #1
 Design: Plan 1
 Lat: 32° 8' 10.304 N
 Long: 104° 0' 2.999 W
 GL: 3056.0
 KB: KB @ 3073.0usft



Azimuths to Grid North
 True North: -0.18°
 Magnetic North: 7.45°
Magnetic Field
 Strength: 48392.7snT
 Dip Angle: 60.00°
 Date: 09/17/2012
 Model: IGRF2010

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
7412.6	0.00	0.00	7412.6	0.0	0.0	0.00	0.00	0.0	KOP-Build 12°/100
8158.0	89.45	179.13	7890.0	-472.9	7.2	12.00	179.13	472.9	EOC-Hold to TD
12349.3	89.45	179.13	7930.0	-4663.4	71.0	0.00	0.00	4663.9	TD at 12349.3

PROJECT DETAILS: Eddy County(NM27E)
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

SITE DETAILS: Sec 18-T25S-28E
 Site Centre Latitude: 32° 8' 10.304 N
 Longitude: 104° 0' 2.999 W
 Positional Uncertainty: 0.0
 Convergence: 0.18
 Local North: Grid

WELL DETAILS: Moody 18 State Com 1H						
+N/-S	+E/-W	Northing	Ground Level: Easting	3056.0 Latitude	Longitude	Slot
0.0	0.0	413428.78	602920.89	32° 8' 10.304 N	104° 0' 2.999 W	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
Moody 1H PBHL	7930.0	-4663.4	71.0	32° 7' 24.151 N	104° 0' 2.341 W	

